PREAMBLE TO OPERATION PERMIT

An Asterisk (*) throughout this document denotes legal authority, limitations and conditions which are not federally enforceable [Section NR 407.09(3)(b), Wis. Adm. Code.].

Historical Summary of Permits/Orders Issued to the Facility.

The following permits, orders, etc., are adopted, under ss. 285.65(3), Wis. Stats., and NR 407.09(2)(d), Wis. Adm. Code, by Permit 627005280-P02 which then becomes the primary enforceable document: 07-JAJ-042 and 627005280-F01

Permit/Order Number	Issuance Date	Sources Covered & Description[1]	Permits Adopted
05-JAJ-015	March 30, 2005	P11, P13, P14, P15, P16, P17, P21, P22, P23, P24, P25, P27, P28, P29, P41, P42, P43, P44, P45, P46, P47, P48, P49, P51, P52, P53, P54, P61, P71, T31, T32	None
627005280-F01	October 10, 2006	Total Facility	05-JAJ-015
07-JAJ-042	April 25, 2007	P111, P113, P114, P115, P116, P117, P121, P122, P123, P124, P127, P128, P129, P141, P142, P143, P144, P145, P146, P147, P148, P151, P152, P153, P161, P162, P163, P165, P166, P171, T131, T132	None
627005280-P02	January 19, 2010	Total Facility	07-JAJ-042 and 627005280-F01

[1] – Total Facility refers to all existing units at the facility at the time of issuance of the permit listed.

Stack and Process Index.

Plant #1:

A. Process P14, Control Device C14, Stack S14 – Raw Silo #1 [Constructed 2005]

B. Process P15, Control Device C15, Stack S15 – Raw Silo #2 [Constructed 2005]

C. Process P22, Control Device C22, Stack S22 – Raw Silo #3

D. Processes P##, Control Device C20, Stack S20 – Elevator #1 (P13), Conveyor #2 (P16), Elevator #2 (P17), Day Tank #1 (P21), Weigh Hopper #1 (P23), Raw Material Heater (P24), Cyclone (P25), Elevator #3 (P27), Resin Tank (P28), Weigh Hopper #2 (P29), Shaker Screen (P41), Elevator #4 (P42), Scalping Screen (P43), Product Cooler (P44), Conveyor #3 (P45), Elevator #5 (P46), Finished Silo #1 (P47), Finished Silo #2 (P48), Weigh Belt (P49), and Finished Silo #3 (P71) [Constructed 2005]

E. Processes P##, Control Device C50, Stack S50: Batch Mixer (P51), Continuous Mixer (P52), Sludge Tank #1 (P53), Hexa Tank #1 (T31), and Hexa Tank #2 (T32) [Constructed 2005]

F. Processes P11 and P61, Fugitive Sources F11 and F61 – Railcar Unloading (P11/F11) and Railcar Loading (P61/F61) [Constructed 2005]

Plant #2:

G. Process P114, Control Device C114, Stack S114 – Raw Silo #11

H. Process P115, Control Device C115, Stack S115 – Raw Silo #12

I. Processes P##, Control Device C120, Stack S120 – Elevator #11 (P113), Conveyor #12 (P116), Elevator #12 (P117), Day Tank (P121), Weigh Hopper #11 (P122), Raw Material Heater (P123), Cyclone (P124), Shaker Screen (P141), Elevator #14 (P142), Scalping Screen (P143), Product Cooler (P144), Elevator #15 (P145), Finished Silo #11 (P146), Finished Silo #12 (P147), Finished Silo #13 (P148), Conveyor #13 (P161), Elevator #16 (P162), Weigh Belt (P163).

J. Processes P##, Control Device C150, Stack S150 – Elevator #13 (P127), Resin Tank (P128), Weigh Hopper #12 (P129), Batch Mixer (P151), Continuous Mixer (P152), Sludge Tank (P153), Hexa Tank #11 (T131), and Hexa Tank #12 (T132)

K. Processes P111 and P171, Fugitive Sources F111 and F171 – Railcar Unloading - Plant #2 (P111/F111) and Railcar Loading - Plant #2 (P171/F171)

Insignificant Emission Units.

☒ Boiler, Turbine, and HVAC System Maintenance.
☒ Convenience Space Heating (< 5 million BTU/hr Burning Gas, Liquid, or Wood).
☒ Convenience Water Heating.
☒ Demineralization and Oxygen Scavenging of Water for Boilers.
☒ Fire Control Equipment.
☒ Fuel Oil Storage Tanks (< 10,000 gal.).
☒ Internal Combustion Engines Used for Warehousing and Material Transport.
☒ Janitorial Activities.
☒ Maintenance of Grounds, Equipment, and Buildings (lawn care, painting, etc.).
☒ Office Activities.
☒ Pollution Control Equipment Maintenance.
☒ Sanitary Sewer and Plumbing Venting.
☒ Additive Tote System.
☒ Flake Resin Loading.
☒ Haul Trucks.
☒ Maintenance Cutting and Welding.
☒ Quality Control Testing - Plant 1.
☒ Quench Water System.
☒ Raw Material Conveyor #11.
☒ Scrap Coated Sand Storage - Plant 2.
☒ Solvent Cold Cleaning - Plant 1.

Permit Shield - Unless precluded by the Administrator of the USEPA, compliance with all emission limitations in this operation permit is considered to be compliance with all emission limitations established under ss. 285.01 to 285.87, Wis. Stats., and emission limitations under the federal clean air act, that are applicable to the source if the permit includes the applicable limitation or if the Department determines that the emission limitations do not apply. The following emission limitations were reviewed in the analysis and preliminary determination and were determined not to apply to this stationary source: None.

Part I -- The headings for the areas in the permit are defined below. The legal authority for these limitations or methods follows them in [brackets].

Pollutant -- This area will note which pollutant is being regulated by the permit.

Limitations -- This area will list all applicable emission limitations that apply to the source, including case-by-case limitations such as Latest Available Control Techniques (LACT), Best Available Control Technology (BACT), or Lowest Achievable Emission Rate (LAER). It will

also list any voluntary restrictions on hours of operation, raw material use, or production rate requested by the permittee to limit potential to emit.

Compliance Demonstration -- The compliance demonstration methods outlined in this area may be used to demonstrate compliance with the associated emission limit or work practice standard listed under the corresponding *Limitations* column. The compliance demonstration area contains limits on parameters or other mechanisms that will be monitored periodically to ensure compliance with the limitations. The requirement to test as well as initial and periodic test schedules, if testing is required, will be stated here. Notwithstanding the compliance determination methods which the owner or operator of a sources is authorized to use under ch. NR 439, Wis. Adm. Code, the Department may use any relevant information or appropriate method to determine a source's compliance with applicable emission limitations.

Reference Test Methods, Recordkeeping, and Monitoring Requirements -- Specific USEPA Reference test methods or other approved test methods will be contained in this area and are the methods that must be used whenever testing is required. A reference test method will be listed even if no testing is immediately required. Also included in this area are any recordkeeping requirements and their frequency and reporting requirements. Accuracy of monitoring equipment shall meet, at a minimum, the requirements of s. NR 439.055(3) and (4), Wis. Adm. Code, as specified in Part II of this permit.

Condition Type -- This area will specify other conditions that are applicable to the entire facility that may not be tied to one specific pollutant.

Conditions -- Specific conditions usually applicable to the entire facility or compliance requirements.

Compliance Demonstration -- This area contains monitoring and testing requirements and methods to demonstrate compliance with the conditions.

PART II -- This section contains the general limitations that the permittee must abide by. These requirements are standard for most sources of air pollutants so they are included in this section with every permit.

PART III — This section contains the requirements of 40 CFR 64 Compliance Assurance Monitoring (CAM) that the permittee must abide by.

AIR POLLUTION CONTROL OPERATION PERMIT REVISION

EI FACILITY NO: 627005280 OPERATION PERMIT NO.: 627005280-P02

TYPE: Significant Revision of a Synthetic Minor non-Part 70 Source, Operation Permit Number 627005280-F01; becoming Part 70.

In compliance with the provisions of Chapter 285, Wis. Stats., and Chapters NR 400 to NR 499, Wis. Adm. Code,

Name of Source: Atlas Resin Proppants LP

Street Address: N7530 County Road P
Taylor, Jackson County, Wisconsin

Responsible Official, & Title: Mr. Robbie Sage, VP of Operations

is authorized to operate a resin-coated sand or ceramic pellets production facility in conformity with the conditions herein.

This revised operation permit expires on **October 10, 2011** [s. 285.66(2)(a), Wis. Stats., and s. NR 407.09(1)(b)1., Wis. Adm. Code]. No permittee may continue operation of a source after the operation permit expires, unless the permittee submits a timely and complete application for renewal of the permit. If you submit a timely and complete application for renewal, the existing operation permit will not expire until the renewal application has been finally acted upon by DNR. [ss. 227.51(2) and 285.62(8)(b), Wis. Stats. and NR 407.04(2), Wis. Adm. Code]. A renewal application must be submitted at least 6 months, but not more than 18 months, prior to the expiration date of the revised operation permit listed above [ss. 285.66(3)(a), Wis. Stats. and NR 407.04(2), Wis. Adm. Code].

Conditions of the construction permit marked with an "*" have been created outside of the Wisconsin's federally approved State Implementation Plan (SIP) and are not federally enforceable.

This authorization requires compliance by the permit holder with the emission limitations, monitoring requirements and other terms and conditions set forth in Parts I, II and III hereof.

Dated at Eau Claire, Wisconsin **January 19, 2010**

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
For the Secretary

By /s/ Neal Baudhuin, for
Tom Woletz
Air/Waste Regional Leader

PART I

A. Process P14, Control Device C14, Stack S14 — Raw Silo #1. [Constructed 2005]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter Emissions	(1) Emissions may not exceed 0.10 pounds per hour. [1] [ss. NR 415.05(1)(o) and 415.05(2), Wis. Adm. Code, and 05-JAJ-015] (2) Stack Parameters: These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated when constructed as proposed. (a) Stack height shall be at least 60 feet above ground level. (b) The stack outlet diameter may not be greater than 6 inches. (c) The stack may not be equipped with a rainhat or other device which impedes the horizontal flow of the exhaust gases. [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code, and 05-JAJ-015]	(1) The panel filter control device shall be in line and shall be operated at all times when the process is in operation. [s. NR 406.10 and s. NR 407.09(4)(a)1., Wis. Adm. Code, and 05-JAJ-015]	(1) Reference Test Method for Particulate Matter Emissions: Whenever particulate matter emission testing is required, the permittee shall use U.S. EPA Method 5, 5A, 5B, 5D, 5E, 5F, 5G, 5H or 17. [s. NR 439.06(1), Wis. Adm. Code] (2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code, and 05-JAJ-015]
2. Visible Emissions	(1) Emissions of shade or density may not exceed number 1 of the Ringlemann chart or 20% opacity. [s. NR 431.05, Wis. Adm. Code, and 05-JAJ-015]	(1) The requirements in I.A.1.b. and I.A.1.c. shall be used to demonstrate compliance with the visible emissions limit. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code, and 05-JAJ-015]	(1) Reference Test Method for Visible Emissions: Whenever visible emission testing is required, the permittee shall use U.S. EPA Method 9. [s. NR 439.06(9)(a)1., Wis. Adm. Code]

[1] The 0.10 pounds per hour emission limit is based on 0.40 pounds of particulate per 1,000 pounds of gas, for: 56 acfm, ambient exhaust temperature, and 0.02% moisture. This emission limit is more restrictive than the allowable emission limit of 38.6 pounds per hour calculated from the process weight rate equation in s. NR 415.05(2), Wis. Adm. Code, for a process weight rate of 150 tons per hour.

B. Process P15, Control Device C15, Stack S15 — Raw Silo #2. [Constructed 2005]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter Emissions	(1) Emissions may not exceed 0.10 pounds per hour. [2] [ss. NR 415.05(1)(o) and 415.05(2), Wis. Adm. Code, and 05-JAJ-015] (2) Stack Parameters: These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated when constructed as proposed. (a) Stack height shall be at least 60 feet above ground level. (b) The stack outlet diameter may not be greater than 6 inches. (c) The stack may not be equipped with a rainhat or other device which impedes the horizontal flow of the exhaust gases. [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code, and 05-JAJ-015]	(1) The panel filter control device shall be in line and shall be operated at all times when the process is in operation. [s. NR 406.10 and s. NR 407.09(4)(a)1., Wis. Adm. Code, and 05-JAJ-015]	(1) Reference Test Method for Particulate Matter Emissions: Whenever particulate matter emission testing is required, the permittee shall use U.S. EPA Method 5, 5A, 5B, 5D, 5E, 5F, 5G, 5H or 17. [s. NR 439.06(1), Wis. Adm. Code] (2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code, and 05-JAJ-015]
2. Visible Emissions	(1) Emissions of shade or density may not exceed number 1 of the Ringlemann chart or 20% opacity. [s. NR 431.05, Wis. Adm. Code, and 05-JAJ-015]	(1) The requirements in I.B.1.b. and I.B.1.c. shall be used to demonstrate compliance with the visible emissions limit. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code, and 05-JAJ-015]	(1) Reference Test Method for Visible Emissions: Whenever visible emission testing is required, the permittee shall use U.S. EPA Method 9. [s. NR 439.06(9)(a)1., Wis. Adm. Code]

[2] The 0.10 pounds per hour emission limit is based on 0.40 pounds of particulate per 1,000 pounds of gas, for: 56 acfm, ambient exhaust temperature, and 0.02% moisture. This emission limit is more restrictive than the allowable emission limit of 38.6 pounds per hour calculated from the process weight rate equation in s. NR 415.05(2), Wis. Adm. Code, for a process weight rate of 150 tons per hour.

C. Process P22, Control Device C22, Stack S22 — Raw Silo #3. [Constructed 2005]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter Emissions	(1) Emissions may not exceed 0.10 pounds per hour. [3] [ss. NR 415.05(1)(o) and 415.05(2), Wis. Adm. Code, and 627005280-P02] (2) Stack Parameters: These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated when constructed as proposed. (a) Stack height shall be at least 60 feet above ground level. (b) The stack outlet diameter may not be greater than 6 inches. (c) The stack may not be equipped with a rainhat or other device which impedes the horizontal flow of the exhaust gases. [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code, and 627005280-P02]	(1) The panel filter control device shall be in line and shall be operated at all times when the process is in operation. [s. NR 406.10 and s. NR 407.09(4)(a)1., Wis. Adm. Code, and 627005280-P02]	(1) Reference Test Method for Particulate Matter Emissions: Whenever particulate matter emission testing is required, the permittee shall use U.S. EPA Method 5, 5A, 5B, 5D, 5E, 5F, 5G, 5H or 17. [s. NR 439.06(1), Wis. Adm. Code] (2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code, and 627005280-P02]
2. Visible Emissions	(2) Emissions of shade or density may not exceed number 1 of the Ringlemann chart or 20% opacity. [s. NR 431.05, Wis. Adm. Code, and 627005280-P02]	(2) The requirements in I.C.1.b. and I.C.1.c. shall be used to demonstrate compliance with the visible emissions limit. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code, and 627005280-P02]	(2) Reference Test Method for Visible Emissions: Whenever visible emission testing is required, the permittee shall use U.S. EPA Method 9. [s. NR 439.06(9)(a)1., Wis. Adm. Code]

[3] The 0.10 pounds per hour emission limit is based on 0.40 pounds of particulate per 1,000 pounds of gas, for: 56 acfm, ambient exhaust temperature, and 0.02% moisture. This emission limit is more restrictive than the allowable emission limit of 38.6 pounds per hour calculated from the process weight rate equation in s. NR 415.05(2), Wis. Adm. Code, for a process weight rate of 150 tons per hour.

D. Processes P##, Control Device C20, Stack S20 – Elevator #1 (P13), Conveyor #2 (P16), Elevator #2 (P17), Day Tank #1 (P21), Weigh Hopper #1 (P23), Raw Material Heater (P24), Cyclone (P25), Elevator #3 (P27), Resin Tank (P28), Weigh Hopper #2 (P29), Shaker Screen (P41), Elevator #4 (P42), Scalping Screen (P43), Product Cooler (P44), Conveyor #3 (P45), Elevator #5 (P46), Finished Silo #1 (P47), Finished Silo #2 (P48), Weigh Belt (P49), Finished Silo #3 (P71), and Finished Product Silo #4 (P72). [Constructed 2005, P72 constructed 2006]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter Emissions	(1) Emissions may not exceed 1.0 pounds per hour. [4] [ss. NR 404.08(2) and NR 415.05(1)(m) or 415.05(2), Wis. Adm. Code, and 07-JAJ-042] (2) Stack Parameters: These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated when constructed as proposed. (a) Stack height shall be at least 16 feet above ground level. (b) The stack outlet diameter may not be greater than 2 feet 6 inches. (c) The stack may not be equipped with a rainhat or other device which impedes the upward flow of the exhaust gases. [s. 285.65(3), Stats. and s. NR 406.10,	(1) The baghouse control device shall be in line and shall be operated at all times when the processes are in operation. [s. NR 406.10 and s. NR 407.09(4)(a)1., Wis. Adm. Code, and 05-JAJ-015] (2) Instrumentation to monitor the pressure drop across the baghouse control device shall be operated properly. [s. NR 439.055(1)(a), Wis. Adm. Code, and 05-JAJ-015] (3) The pressure drop across the baghouse control device shall be maintained between 1 and 8 inches water column, or as required in the CAM Plan under Part III. [s. NR 407.09(4)(a)1., Wis. Adm. Code, and 05-JAJ-015]	(1) Reference Test Method for Particulate Matter Emissions: Whenever particulate matter emission testing is required, the permittee shall use U.S. EPA Method 5, 5A, 5B, 5D, 5E, 5F, 5G, 5H or 17 including condensible backhalf emissions (U.S. EPA Method 202). [s. NR 439.06(1), Wis. Adm. Code] (2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code, and 05-JAJ-015] (3) The permittee shall record the pressure drop across the baghouse once for every 8 hours of operation or once per day, whichever yields the greater number of measurements. [s. NR 439.055(2)(b)1., Wis. Adm. Code, and 05-JAJ-015] (4) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the baghouse system, containing the date of the action, initials of inspector, and the results. [s. NR

[4] The 1.0 pounds per hour emission limit is based on modeling and is included in the permit to protect the National Ambient Air Quality Standards (NAAQS). This emission limit is more restrictive than the allowable emission limit of 10.31 pounds per hour calculated from the from 0.2 pounds per 1,000 pounds of exhaust gas limit in s. NR 415.05(1)(m), Wis. Adm. Code. The emission rate determined using the process weight equation is less restrictive than the emission limit calculated from 0.2 pounds per 1,000 pounds of exhaust gas limit in s. NR 415.05(1)(m), Wis. Adm. Code.

D. Processes P##, Control Device C20, Stack S20 – Elevator #1 (P13), Conveyor #2 (P16), Elevator #2 (P17), Day Tank #1 (P21), Weigh Hopper #1 (P23), Raw Material Heater (P24), Cyclone (P25), Elevator #3 (P27), Resin Tank (P28), Weigh Hopper #2 (P29), Shaker Screen (P41), Elevator #4 (P42), Scalping Screen (P43), Product Cooler (P44), Conveyor #3 (P45), Elevator #5 (P46), Finished Silo #1 (P47), Finished Silo #2 (P48), Weigh Belt (P49), Finished Silo #3 (P71), and Finished Product Silo #4 (P72). [Constructed 2005, P72 constructed 2006]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
	Wis. Adm. Code, and 05-JAJ-015] (3) Compliance Assurance Monitoring (CAM) Requirements: Processes exhausting to C20/S20 are a pollutant-specific emissions unit for particulate matter and is subject to the CAM requirements of 40 CFR, part 64. The permittee's Compliance Assurance Monitoring Plan for Baghouse C20 for PM control is included as Part III of this permit. [s. 285.65(13), Wis. Stats. 40 CFR 64.2 and 40 CFR 64.3(d)]		439.04(1)(d), Wis. Adm. Code, and 05-JAJ-015] (5) The baghouse control device pressure drop monitoring device shall be maintained in accordance with the manufacturer's recommendations and shall be calibrated at least once per year. [s. NR 439.11(1)(b) and s. NR 439.055(4), Wis. Adm. Code, and 05-JAJ-015]
2. Visible Emissions	(1) Emissions of shade or density may not exceed number 1 of the Ringlemann chart or 20% opacity. [s. NR 431.05, Wis. Adm. Code, and 05-JAJ-015]	(1) The requirements in I.D.1.b. and I.D.1.c. shall be used to demonstrate compliance with the visible emissions limit. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code, and 05-JAJ-015]	(1) Reference Test Method for Visible Emissions: Whenever visible emission testing is required, the permittee shall use U.S. EPA Method 9. [s. NR 439.06(9)(a)1., Wis. Adm. Code]

E. Processes P##, Control Device C50, Stack S50: Batch Mixer (P51), Continuous Mixer (P52), Sludge Tank #1 (P53), Hexa Tank #1 (T31), and Hexa Tank #2 (T32). [Constructed 2005]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter Emissions	(1) Emissions may not exceed 1.5 pounds per hour. [5] [ss. NR 404.08(2) and NR 415.05(1)(m) or 415.05(2), Wis. Adm. Code, and 05-JAJ-015] (2) Stack Parameters: These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated when constructed as proposed. (a) Stack height shall be at least 75 feet above ground level. (b) The stack outlet diameter may not be greater than 2 feet. (c) The stack may not be equipped with a rainhat or other device which impedes the upward flow of the exhaust gases. [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code, and 05-JAJ-015]	(1) The wet scrubber control device, including demister, shall be in line and shall be operated at all times when the processes are in operation. [s. NR 406.10 and s. NR 407.09(4)(a)1., Wis. Adm. Code, and 05-JAJ-015] (2) Instrumentation to monitor the pressure drop across the wet scrubber and demister, in inches of water column, shall be operated properly. [s. NR 439.055(1)(a), Wis. Adm. Code, and 05-JAJ-015] (3) Instrumentation to monitor the wet scrubber liquor flow, in gallons per minute, shall be operated properly. [s. NR 439.055(1)(e), Wis. Adm. Code, and 05-JAJ-015] (4) Instrumentation and laboratory techniques[6] to monitor the pH of the wet scrubber absorbing fluid shall be utilized properly. [s. NR 439.055(1)(f), Wis. Adm. Code, and 05-JAJ-015] (5) The pressure drop across the wet scrubber	(1) Reference Test Method for Particulate Matter Emissions: Whenever particulate matter emission testing is required, the permittee shall use U.S. EPA Method 5, 5A, 5B, 5D, 5E, 5F, 5G, 5H or 17 including condensible backhalf emissions (U.S. EPA Method 202). [s. NR 439.06(1), Wis. Adm. Code] (2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code, and 05-JAJ-015] (3) Except as provided under (d), the permittee shall measure and record the following operational variables once for every 8 hours of operation or once per day, whichever yields the greater number of measurements: (a) Pressure drop across the wet scrubber and demister, in inches of water column, (b) Flow of liquor, in gallons per minute, and (c) pH of the absorption scrubbing fluid.

[5] The 1.5 pounds per hour emission limit is based on modeling and is included in the permit to protect the National Ambient Air Quality Standards (NAAQS). This emission limit is more restrictive than the allowable emission limit of 5.18 pounds per hour calculated from the from 0.2 pounds per 1,000 pounds of exhaust gas limit in s. NR 415.05(1)(m), Wis. Adm. Code. The emission rate determined using the process weight equation is less restrictive than the emission limit calculated from 0.2 pounds per 1,000 pounds of exhaust gas limit in s. NR 415.05(1)(m), Wis. Adm. Code.

[6] Atlas takes samples from the sludge tank manually and are measured in the laboratory.

E. Processes P##, Control Device C50, Stack S50: Batch Mixer (P51), Continuous Mixer (P52), Sludge Tank #1 (P53), Hexa Tank #1 (T31), and Hexa Tank #2 (T32). [Constructed 2005]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
		and demister shall be maintained between 8 and 17 inches water column, or an alternative range approved in writing by the Department. [s. NR 407.09(4)(a)1., Wis. Adm. Code, and 05-JAJ-015] (6) The solids content of recirculated scrubber water shall be maintained between 0 NTU to 550 NTUs, or an alternative range approved in writing by the Department which will assure compliance with I.E.1.a.(1). [s. 285.65(4), Wis. Stats., and s. NR 407.09(4), Wis. Adm. Code, 05-JAJ-015 and 627005280-F01] (7) The permittee shall use a method approved by the Department in writing, to monitor the solids content of the recirculated scrubber water as required by I.E.1.c.(3). [s. 285.65(4), Wis. Stats., and s. NR 407.09(4), Wis. Adm. Code, and 05-JAJ-015]	(d) The solids content of the recirculated scrubber water shall be measured and recorded at least once per day. [s. NR 439.055(2)(b), Wis. Adm. Code, and s. 285.65(4), Wis. Stats., and 05-JAJ-015] (4) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the wet scrubber system, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code, and 05-JAJ-015] (5) The wet scrubber pressure drop, liquor flow, and pH monitoring devices shall be maintained in accordance with the manufacturer's recommendations and shall be calibrated at least once per year. [s. NR 439.11(1)(b) and s. NR 439.055(4), Wis. Adm. Code, and 05-JAJ-015]
2. Visible Emissions	(1) Emissions of shade or density may not exceed number 1 of the Ringlemann chart or 20% opacity. [s. NR 431.05, Wis. Adm. Code, and 05-JAJ-015]	(1) The requirements in I.E.1.b. and I.E.1.c. shall be used to demonstrate compliance with the visible emissions limit. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code, and 05-JAJ-015]	(1) Reference Test Method for Visible Emissions: Whenever visible emission testing is required, the permittee shall use U.S. EPA Method 9. [s. NR 439.06(9)(a)1., Wis. Adm. Code]
3. Volatile Organic	(1) Latest Available Control Techniques and operating practices demonstrating best	(1) The facility shall operate the wet scrubber at all times the processes are operating. [s. NR	(1) Whenever VOC compliance testing is required, USEPA Method 18, 25 or 25A,

E. Processes P##, Control Device C50, Stack S50: Batch Mixer (P51), Continuous Mixer (P52), Sludge Tank #1 (P53), Hexa Tank #1 (T31), and Hexa Tank #2 (T32). [Constructed 2005]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
Compounds	current technology (LACT). The permittee has demonstrated that 85% control of VOC emissions leaving the wet scrubber is technologically infeasible for the process line, and so shall use LACT. LACT is defined as the following process operation practices and limitations: (a) The facility shall operate the wet scrubber at all times the processes P51-54, T31, and T32 are operational, with monitoring of parameters: pressure differential, liquor flow rate, and pH of the scrubbing fluid. (b) The wet scrubber shall achieve one of the following: (i) An overall control efficiency of 64% for VOC emissions, or (ii) VOC emission rate no greater than 10.6 pounds per hour. [s. NR 424.03(2)(c), Wis. Adm. Code, and 05-JAJ-015] (2) Compliance Assurance Monitoring (CAM) Requirements: Processes exhausting to C50/S50 are a pollutant-specific emissions unit for volatile organic compounds and is subject to the CAM requirements of 40 CFR, part 64. The permittee's Compliance Assurance Monitoring Plan for Scrubber C50	406.10 and s. NR 407.09(4)(a)1., Wis. Adm. Code, and 05-JAJ-015] (2) As required under I.E.1.b.(2)-(4). (3) The pressure drop across the wet scrubber and demister, the liquor flow rate, and the pH of the scrubbing fluid shall be maintained per manufacturer specifications, the most recent compliance test, the malfunction prevention and abatement plan required under I.ZZZ.1., or the CAM plan required under Part III to meet the requirements under I.E.3.a.(1) and I.E.1.a.(1). [s. NR 419.03(1), Wis. Adm. Code, and s. 285.65(7), Wis. Stats., and 05-JAJ-015]	or another method approved by the Department in writing shall be used. When approved in writing an equivalent test method may be substituted for the required test method. [s. NR 439.06(3), Wis. Adm. Code, and 05-JAJ-015] (2) As required under I.E.1.c.(3)-(5). (3) The permittee shall inspect the circulation pump and packing of the wet scrubber monthly. [s. NR 439.04(1)(d), Wis. Adm. Code, and 05-JAJ-015] (4) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the wet scrubber, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code, and 05-JAJ-015]

E. Processes P##, Control Device C50, Stack S50: Batch Mixer (P51), Continuous Mixer (P52), Sludge Tank #1 (P53), Hexa Tank #1 (T31), and Hexa Tank #2 (T32). [Constructed 2005]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
	for volatile organic compound control is included as Part III of this permit. [s. 285.65(13), Wis. Stats. 40 CFR 64.2 and 40 CFR 64.3(d)]		
4. Phenol Emissions	(1) The processes may not use more than 586,417 pounds of flake resin per month, based on a 12-month rolling average (7,037,000 pounds per year). [s. 285.65(7), Wis. Stats., and 05-JAJ-015] (2) The free phenol content of the flake resin may not exceed 1.5%, by weight. [s. 285.65(7), Wis. Stats., and 05-JAJ-015] (3) The wet scrubber shall achieve one of the following: (a) An overall control efficiency of 64% for VOC emissions, as required under I.E.3.a.(1)(b)(i), (b) An overall control efficiency of 54.5% for phenol emissions, or (c) A maximum emission rate of 2.8 lb/hr.[7] [s. 285.65(7), Wis. Stats., 05-JAJ-015 and 627005280-P02]	(1) The average monthly usage amounts of flake resin shall be determined according to the following equation: Uavg = [(AU1) + (AU2) + … + (AUi)] / 12 where, Uavg = Average pounds of flake resin used per month, as an average over the previous 12 consecutive month period, AUi = Actual pounds of flake resin used, in month i. These calculations shall be completed within ten days of the end of each calendar month. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code, and s. 285.65(7), Wis. Stats., and 05-JAJ-015] (2) As required under I.E.3.b.(3).	(1) Whenever Phenol compliance testing is required, NIOSH Method 2546, or another method approved by the Department in writing shall be used. When approved in writing an equivalent test method may be substituted for the required test method. [s. NR 439.06(8), Wis. Adm. Code, and 05-JAJ-015] (2) The permittee shall record and maintain records of the following: (a) The monthly total of flake resin used each month, (b) The monthly average of flake resin used, according to I.E.4.b.(1), and (c) Material safety data sheets or other technical documents which show the free phenol content of the flake resin used. [s. NR 407.09(4)(a)1., Wis. Adm. Code, and s. 285.65(7), Wis. Stats., and 05-JAJ-015] (3) As required under I.E.1.c.(3).

[7] This emission limitation established under 627005280-P02, along with current limits under (1) – (3) will keep potential emissions of phenol to <10 TPY (9.5 TPY).

F. Processes P11 and P61, Fugitive Sources F11 and F61 – Railcar Unloading (P11/F11) and Railcar Loading (P61/F61). [Constructed 2005]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Fugitive Emissions	(1) The permittee may not cause, allow or permit any materials to be handled, transported or stored without taking precautions to prevent particulate matter from becoming airborne. Nor may the permittee allow a structure, a parking lot, or a road to be used, constructed, altered, repaired, sand blasted, or demolished without taking such precautions. [s. NR 415.04(Intro.), Wis. Adm. Code, and 05-JAJ-015]	(1) No person may cause, allow or permit any materials to be handled, transported or stored without taking precautions to prevent particulate matter from becoming airborne. Nor may a person allow a structure, a parking lot, or a road to be used, constructed, altered, repaired, sand blasted or demolished without taking such precautions. [s. NR 415.04, Wis. Adm. Code, and 05-JAJ-015] (2) Such precautions shall include, but not be limited to: (a) Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, or construction operations. (b) Application of asphalt, water, suitable chemicals or plastic covering on dirt roads, material stockpiles and other surfaces which can create airborne dust, provided such application does not create a hydrocarbon, odor or water pollution problem. (c) Installation and use of hoods, fans, and air cleaning devices to enclose and vent the areas where dusty materials are handled. (d) Covering or securing of materials likely to become airborne while being moved on public roads, railroads or navigable waters. (e) Conduct of agricultural practices such as tilling of land or application of fertilizers in such manner as not to create air pollution. (f) The paving or maintenance of roadway areas so as not to create air pollution. [s. NR 415.04(1), Wis. Adm. Code, and 05-JAJ-015]	(1) Reference Test Method for Particulate Matter Emissions: Whenever particulate matter emission testing is required, the permittee shall use U.S. EPA Method 5, 5A, 5B, 5D, 5E, 5F, 5G, 5H or 17. [s. NR 439.06(1), Wis. Adm. Code] (2) If using water or chemicals for dust control, the permittee shall record: (a) the date and time of the water or chemical application; and (b) the area(s) at the facility where water or chemicals are applied. [s. NR 439.04(1)(d), Wis. Adm. Code, and 05-JAJ-015]

G. Process P114, Control Device C114, Stack S114 – Raw Silo #11

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter Emissions	(1) Emissions may not exceed 0.10 pounds per hour. [8] [ss. NR 415.05(1)(o) and 415.05(2), Wis. Adm. Code, and 07-JAJ-042] (2) Stack Parameters: These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated when constructed as proposed. (a) Stack height shall be at least 60 feet above ground level. (b) The stack outlet diameter may not be greater than 6 inches. (c) The stack may not be equipped with a rainhat or other device which impedes the horizontal flow of the exhaust gases. [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code, and 07-JAJ-042]	(1) The panel filter control device shall be in line and shall be operated at all times when the process is in operation. [s. NR 406.10 and s. NR 407.09(4)(a)1., Wis. Adm. Code, and 07-JAJ-042]	(1) Reference Test Method for Particulate Matter Emissions: Whenever particulate matter emission testing is required, the permittee shall use U.S. EPA Method 5, 5A, 5B, 5D, 5E, 5F, 5G, 5H or 17. [s. NR 439.06(1), Wis. Adm. Code] (2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code, and 07-JAJ-042]
2. Visible Emissions	(1) Emissions of shade or density may not exceed number 1 of the Ringlemann chart or 20% opacity. [s. NR 431.05, Wis. Adm. Code, and 07-JAJ-042]	(1) The requirements in I.G.1.b. and I.G.1.c. shall be used to demonstrate compliance with the visible emissions limit. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code, and 07-JAJ-042]	(1) Reference Test Method for Visible Emissions: Whenever visible emission testing is required, the permittee shall use U.S. EPA Method 9. [s. NR 439.06(9)(a)1., Wis. Adm. Code]

[8] The 0.10 pounds per hour emission limit is based on 0.40 pounds of particulate per 1,000 pounds of gas, for: 56 acfm, ambient exhaust temperature, and 0.02% moisture. This emission limit is more restrictive than the allowable emission limit of 38.6 pounds per hour calculated from the process weight rate equation in s. NR 415.05(2), Wis. Adm. Code, for a process weight rate of 150 tons per hour.

H. Process P115, Control Device C115, Stack S115 – Raw Silo #12

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter Emissions	(1) Emissions may not exceed 0.10 pounds per hour. [9] [ss. NR 415.05(1)(o) and 415.05(2), Wis. Adm. Code, and 07-JAJ-042] (2) Stack Parameters: These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated when constructed as proposed. (a) Stack height shall be at least 60 feet above ground level. (b) The stack outlet diameter may not be greater than 6 inches. (c) The stack may not be equipped with a rainhat or other device which impedes the horizontal flow of the exhaust gases. [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code, and 07-JAJ-042]	(1) The panel filter control device shall be in line and shall be operated at all times when the process is in operation. [s. NR 406.10 and s. NR 407.09(4)(a)1., Wis. Adm. Code, and 07-JAJ-042]	(1) Reference Test Method for Particulate Matter Emissions: Whenever particulate matter emission testing is required, the permittee shall use U.S. EPA Method 5, 5A, 5B, 5D, 5E, 5F, 5G, 5H or 17. [s. NR 439.06(1), Wis. Adm. Code] (2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code, and 07-JAJ-042]
2. Visible Emissions	(1) Emissions of shade or density may not exceed number 1 of the Ringlemann chart or 20% opacity. [s. NR 431.05, Wis. Adm. Code, and 07-JAJ-042]	(1) The requirements in I.H.1.b. and I.H.1.c. shall be used to demonstrate compliance with the visible emissions limit. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code, and 07-JAJ-042]	(1) Reference Test Method for Visible Emissions: Whenever visible emission testing is required, the permittee shall use U.S. EPA Method 9. [s. NR 439.06(9)(a)1., Wis. Adm. Code]

[9] The 0.10 pounds per hour emission limit is based on 0.40 pounds of particulate per 1,000 pounds of gas, for: 56 acfm, ambient exhaust temperature, and 0.02% moisture. This emission limit is more restrictive than the allowable emission limit of 38.6 pounds per hour calculated from the process weight rate equation in s. NR 415.05(2), Wis. Adm. Code, for a process weight rate of 150 tons per hour.

I. Processes P##, Control Device C120, Stack S120 – Elevator #11 (P113), Conveyor #12 (P116), Elevator #12 (P117), Day Tank (P121), Weigh Hopper #11 (P122), Raw Material Heater (P123), Cyclone (P124), Shaker Screen (P141), Elevator #14 (P142), Scalping Screen (P143), Product Cooler (P144), Elevator #15 (P145), Finished Silo #11 (P146), Finished Silo #12 (P147), Finished Silo #13 (P148), Conveyor #13 (P161), Elevator #16 (P162), Weigh Belt (P163)

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter Emissions	(1) Emissions may not exceed 1.0 pounds per hour. [10] [ss. NR 404.08(2) and NR 415.05(1)(m) or 415.05(2), Wis. Adm. Code, and 07-JAJ-042] (2) Stack Parameters: These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated when constructed as proposed. (a) Stack height shall be at least 16 feet above ground level. (b) The stack outlet diameter may not be greater than 2 feet 6 inches. (c) The stack may not be equipped with a rainhat or other device which impedes the upward flow of the exhaust gases. [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code, and 07-JAJ-042]	(1) The baghouse control device shall be in line and shall be operated at all times when the processes are in operation. [s. NR 406.10 and s. NR 407.09(4)(a)1., Wis. Adm. Code, and 07-JAJ-042] (2) Instrumentation to monitor the pressure drop across the baghouse control device shall be installed and operated properly. [s. NR 439.055(1)(a), Wis. Adm. Code, and 07-JAJ-042] (3) The pressure drop across the baghouse control device shall be maintained between 1 and 8 inches water column, or as required in the CAM Plan under Part III. [s. NR 407.09(4)(a)1., Wis. Adm. Code, and 07-JAJ-042]	(1) Reference Test Method for Particulate Matter Emissions: Whenever particulate matter emission testing is required, the permittee shall use U.S. EPA Method 5, 5A, 5B, 5D, 5E, 5F, 5G, 5H or 17 including condensible backhalf emissions (U.S. EPA Method 202). [s. NR 439.06(1), Wis. Adm. Code] (2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code, and 07-JAJ-042] (3) The permittee shall record the pressure drop across the baghouse once for every 8 hours of operation or once per day, whichever yields the greater number of measurements. [s. NR 439.055(2)(b)1., Wis. Adm. Code, and 07-JAJ-042] (4) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the baghouse system,

[10] The 1.0 pounds per hour emission limit is based on modeling and is included in the permit to protect the National Ambient Air Quality Standards (NAAQS). This emission limit is more restrictive than the allowable emission limit of 10.3 pounds per hour calculated from the from 0.2 pounds per 1,000 pounds of exhaust gas limit in s. NR 415.05(1)(m), Wis. Adm. Code. The emission rate determined using the process weight equation is less restrictive than the emission limit calculated from 0.2 pounds per 1,000 pounds of exhaust gas limit in s. NR 415.05(1)(m), Wis. Adm. Code.

I. Processes P##, Control Device C120, Stack S120 – Elevator #11 (P113), Conveyor #12 (P116), Elevator #12 (P117), Day Tank (P121), Weigh Hopper #11 (P122), Raw Material Heater (P123), Cyclone (P124), Shaker Screen (P141), Elevator #14 (P142), Scalping Screen (P143), Product Cooler (P144), Elevator #15 (P145), Finished Silo #11 (P146), Finished Silo #12 (P147), Finished Silo #13 (P148), Conveyor #13 (P161), Elevator #16 (P162), Weigh Belt (P163)

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
	(3) Compliance Assurance Monitoring (CAM) Requirements: Processes exhausting to C120/S120 are a pollutant-specific emissions unit for particulate matter and is subject to the CAM requirements of 40 CFR, part 64. The permittee's Compliance Assurance Monitoring Plan for Baghouse C120 for PM control is included as Part III of this permit. [s. 285.65(13), Wis. Stats. 40 CFR 64.2 and 40 CFR 64.3(d)]		containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code, and 07-JAJ-042] (5) The baghouse control device pressure drop monitoring device shall be maintained in accordance with the manufacturer's recommendations and shall be calibrated at least once per year. [s. NR 439.11(1)(b) and s. NR 439.055(4), Wis. Adm. Code, and 07-JAJ-042]
2. Visible Emissions	(1) Emissions of shade or density may not exceed number 1 of the Ringlemann chart or 20% opacity. [s. NR 431.05, Wis. Adm. Code, and 07-JAJ-015]	(1) The requirements in I.I.1.b. and I.I.1.c. shall be used to demonstrate compliance with the visible emissions limit. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code, and 07-JAJ-042]	(1) Reference Test Method for Visible Emissions: Whenever visible emission testing is required, the permittee shall use U.S. EPA Method 9. [s. NR 439.06(9)(a)1., Wis. Adm. Code]

J. Processes P##, Control Device C150, Stack S150 – Elevator #13 (P127), Resin Tank (P128), Weigh Hopper #12 (P129), Batch Mixer (P151), Continuous Mixer (P152), Sludge Tank (P153), Hexa Tank #11 (T131), and Hexa Tank #12 (T132)

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter Emissions	(1) Emissions may not exceed 1.5 pounds per hour. [11] [ss. NR 404.08(2) and NR 415.05(1)(m) or 415.05(2), Wis. Adm. Code, and 07-JAJ-042] (2) Stack Parameters: These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated when constructed as proposed. (a) Stack height shall be at least 75 feet above ground level. (b) The stack outlet diameter may not be greater than 2 feet. (c) The stack may not be equipped with a rainhat or other device which impedes the upward flow of the exhaust gases. [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code, and 07-JAJ-042]	(1) The wet scrubber control device, including demister, shall be in line and shall be operated at all times when the processes are in operation. [s. NR 406.10 and s. NR 407.09(4)(a)1., Wis. Adm. Code, and 07-JAJ-042] (2) Instrumentation to monitor the pressure drop across the wet scrubber and demister, in inches of water column, shall be installed and operated properly. [s. NR 439.055(1)(a), Wis. Adm. Code, and 07-JAJ-042] (3) Instrumentation to monitor the wet scrubber liquor flow, in gallons per minute, shall be installed and operated properly. [s. NR 439.055(1)(e), Wis. Adm. Code, and 07-JAJ-042] (4) Instrumentation and laboratory techniques[12] to monitor the pH of the wet scrubber absorbing fluid shall be utilized properly. [s. NR 439.055(1)(f), Wis. Adm. Code, and 07-JAJ-042]	(1) Reference Test Method for Particulate Matter Emissions: Whenever particulate matter emission testing is required, the permittee shall use U.S. EPA Method 5, 5A, 5B, 5D, 5E, 5F, 5G, 5H or 17 including condensible backhalf emissions (U.S. EPA Method 202). [s. NR 439.06(1), Wis. Adm. Code] (2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code, and 07-JAJ-042] (3) Except as provided under (d), the permittee shall measure and record the following operational variables once for every 8 hours of operation or once per day, whichever yields the greater number of measurements: (a) Pressure drop across the wet scrubber and demister, in inches of water column, (b) Flow of liquor, in gallons per minute, and (c) pH of the absorption scrubbing fluid.

[11] The 1.5 pounds per hour emission limit is based on modeling and is included in the permit to protect the National Ambient Air Quality Standards (NAAQS). This emission limit is more restrictive than the allowable emission limit of 5.18 pounds per hour calculated from the from 0.2 pounds per 1,000 pounds of exhaust gas limit in s. NR 415.05(1)(m), Wis. Adm. Code. The emission rate determined using the process weight equation is less restrictive than the emission limit calculated from 0.2 pounds per 1,000 pounds of exhaust gas limit in s. NR 415.05(1)(m), Wis. Adm. Code.

[12] Atlas takes samples from the sludge tank manually and are measured in the laboratory.

J. Processes P##, Control Device C150, Stack S150 – Elevator #13 (P127), Resin Tank (P128), Weigh Hopper #12 (P129), Batch Mixer (P151), Continuous Mixer (P152), Sludge Tank (P153), Hexa Tank #11 (T131), and Hexa Tank #12 (T132)

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
		(5) The pressure drop across the wet scrubber and demister shall be maintained between 8 and 17 inches water column, or an alternative range approved in writing by the Department. [s. NR 407.09(4)(a)1., Wis. Adm. Code, and 07-JAJ-042] (6) The solids content of recirculated scrubber water shall be maintained between 0 NTU to 550 NTUs, or an alternative range approved in writing by the Department which will assure compliance with I.J.1.a.(1). [s. 285.65(4), Wis. Stats., and s. NR 407.09(4), Wis. Adm. Code, 07-JAJ-042 and 627005280-F01] (7) The permittee shall use a method approved by the Department in writing, to monitor the solids content of the recirculated scrubber water as required by I.J.1.c.(3). [s. 285.65(4), Wis. Stats., and s. NR 407.09(4), Wis. Adm. Code, and 07-JAJ-042]	(d) The solids content of the recirculated scrubber water shall be measured and recorded at least once per day. [s. NR 439.055(2)(b), Wis. Adm. Code, and s. 285.65(4), Wis. Stats., and 07-JAJ-042] (4) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the wet scrubber system, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code, and 07-JAJ-042] (5) The wet scrubber pressure drop, liquor flow, and pH monitoring devices shall be maintained in accordance with the manufacturer's recommendations and shall be calibrated at least once per year. [s. NR 439.11(1)(b) and s. NR 439.055(4), Wis. Adm. Code, and 07-JAJ-042]
2. Visible Emissions	(1) Emissions of shade or density may not exceed number 1 of the Ringlemann chart or 20% opacity. [s. NR 431.05, Wis. Adm. Code, and 07-JAJ-042]	(1) The requirements in I.J.1.b. and I.J.1.c. shall be used to demonstrate compliance with the visible emissions limit. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code, and 07-JAJ-042]	(1) Reference Test Method for Visible Emissions: Whenever visible emission testing is required, the permittee shall use U.S. EPA Method 9. [s. NR 439.06(9)(a)1., Wis. Adm. Code]
3. Volatile Organic	(1) Latest Available Control Techniques and operating practices demonstrating	(1) The facility shall operate the wet scrubber at all times the processes are operating. [s. NR	(1) Whenever VOC compliance testing is required, USEPA Method 18, 25 or 25A, or

J. Processes P##, Control Device C150, Stack S150 – Elevator #13 (P127), Resin Tank (P128), Weigh Hopper #12 (P129), Batch Mixer (P151), Continuous Mixer (P152), Sludge Tank (P153), Hexa Tank #11 (T131), and Hexa Tank #12 (T132)

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
Compounds	best current technology (LACT). The permittee has demonstrated that 85% control of VOC emissions leaving the wet scrubber is technologically infeasible for the process line, and so shall use LACT. LACT is defined as the following process operation practices and limitations: (a) The facility shall operate the wet scrubber at all times the processes P127-129, 151-153, T131, and T132 are operational, with monitoring of parameters: pressure differential, liquor flow rate, and pH of the scrubbing fluid. (b) The wet scrubber shall achieve one of the following: (i) An overall control efficiency of 64% for VOC emissions, or (ii) VOC emission rate no greater than 11.0 pounds per hour. [s. NR 424.03(2)(c), Wis. Adm. Code, and 07-JAJ-042] (2) Compliance Assurance Monitoring (CAM) Requirements: Processes exhausting to C150/S150 are a pollutant-specific emissions unit for volatile organic compounds and is subject to the CAM requirements of 40 CFR, part 64. The permittee's Compliance Assurance Monitoring Plan for Scrubber C150 for	406.10 and s. NR 407.09(4)(a)1., Wis. Adm. Code, and 07-JAJ-042] (2) As required under I.J.1.b.(2)-(4). (3) The pressure drop across the wet scrubber and demister, the liquor flow rate, and the pH of the scrubbing fluid shall be maintained per manufacturer specifications, the most recent compliance test, the malfunction prevention and abatement plan required under I.ZZZ.1., or the CAM Plan required under Part III to meet the requirements under I.J.3.a.(1) and I.J.1.a.(1). [s. NR 419.03(1), Wis. Adm. Code, and s. 285.65(7), Wis. Stats., and 07-JAJ-042]	another method approved by the Department in writing shall be used. When approved in writing an equivalent test method may be substituted for the required test method. [s. NR 439.06(3), Wis. Adm. Code, and 07-JAJ-042] (2) As required under I.J.1.c.(3)-(5). (3) The permittee shall inspect the circulation pump and packing of the wet scrubber monthly. [s. NR 439.04(1)(d), Wis. Adm. Code, and 07-JAJ-042] (4) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the wet scrubber, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code, and 07-JAJ-042]

J. Processes P##, Control Device C150, Stack S150 – Elevator #13 (P127), Resin Tank (P128), Weigh Hopper #12 (P129), Batch Mixer (P151), Continuous Mixer (P152), Sludge Tank (P153), Hexa Tank #11 (T131), and Hexa Tank #12 (T132)

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
	volatile organic compound control is included as Part III of this permit. [s. 285.65(13), Wis. Stats. 40 CFR 64.2 and 40 CFR 64.3(d)]		
4. Phenol Emissions	(1) The processes may not use more than 850,000 pounds of flake resin per month, based on a 12-month rolling average (10,200,000 pounds per year). [s. 285.65(7), Wis. Stats., and 07-JAJ-042] (2) The free phenol content of the flake resin may not exceed 1.5%, by weight. [s. 285.65(7), Wis. Stats., and 07-JAJ-042] (3) The wet scrubber shall achieve one of the following: (a) An overall control efficiency of 64% for VOC emissions, as required under I.J.3.a.(1)(b)(i), (b) An overall control efficiency of 54.5% for phenol emissions, or (c) A maximum emission rate of 3.3 lb/hr.[13] [s. 285.65(7), Wis. Stats., and 07-JAJ-042, and 627005280-P02]	(1) The average monthly usage amounts of flake resin shall be determined according to the following equation: Uavg = [(AU1) + (AU2) + … + (AUi)] / 12 where, Uavg = Average pounds of flake resin used per month, as an average over the previous 12 consecutive month period, AUi = Actual pounds of flake resin used, in month i. These calculations shall be completed within ten days of the end of each calendar month. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code, and s. 285.65(7), Wis. Stats., and 07-JAJ-042] (2) As required under I.J.3.b.(3).	(1) Whenever Phenol compliance testing is required, NIOSH Method 2546, or another method approved by the Department in writing shall be used. When approved in writing an equivalent test method may be substituted for the required test method. [s. NR 439.06(8), Wis. Adm. Code, and 07-JAJ-042] (2) The permittee shall record and maintain records of the following: (a) The monthly total of flake resin used each month, (b) The monthly average of flake resin used, according to I.J.4.b.(1), and (c) Material safety data sheets or other technical documents which show the free phenol content of the flake resin used. [s. NR 407.09(4)(a)1., Wis. Adm. Code, and s. 285.65(7), Wis. Stats., and 07-JAJ-042] (3) As required under I.J.1.c.(3).

[13] This emission limitation established under 627005280-P02, along with current limits under (1) – (3) will keep potential emissions of phenol to <10 TPY (9.5 TPY).

K. Processes P111 and P171, Fugitive Sources F111 and F171 – Railcar Unloading - Plant #2 (P111/F111) and Railcar Loading - Plant #2 (P171/F171)

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Fugitive Emissions	(1) The permittee may not cause, allow or permit any materials to be handled, transported or stored without taking precautions to prevent particulate matter from becoming airborne. Nor may the permittee allow a structure, a parking lot, or a road to be used, constructed, altered, repaired, sand blasted, or demolished without taking such precautions. [s. NR 415.04(Intro.), Wis. Adm. Code, and 07-JAJ-042]	(1) No person may cause, allow or permit any materials to be handled, transported or stored without taking precautions to prevent particulate matter from becoming airborne. Nor may a person allow a structure, a parking lot, or a road to be used, constructed, altered, repaired, sand blasted or demolished without taking such precautions. [s. NR 415.04, Wis. Adm. Code, and 07-JAJ-042] (2) Such precautions shall include, but not be limited to: (a) Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, or construction operations. (b) Application of asphalt, water, suitable chemicals or plastic covering on dirt roads, material stockpiles and other surfaces which can create airborne dust, provided such application does not create a hydrocarbon, odor or water pollution problem. (c) Installation and use of hoods, fans, and air cleaning devices to enclose and vent the areas where dusty materials are handled. (d) Covering or securing of materials likely to become airborne while being moved on public roads, railroads or navigable waters. (e) Conduct of agricultural practices such as tilling of land or application of fertilizers in such manner as not to create air pollution. (f) The paving or maintenance of roadway areas so as not to create air pollution. [s. NR 415.04(1), Wis. Adm. Code, and 07-JAJ-042]	(1) Reference Test Method for Particulate Matter Emissions: Whenever particulate matter emission testing is required, the permittee shall use U.S. EPA Method 5, 5A, 5B, 5D, 5E, 5F, 5G, 5H or 17. [s. NR 439.06(1), Wis. Adm. Code] (2) If using water or chemicals for dust control, the permittee shall record: (a) the date and time of the water or chemical application; and (b) the area(s) at the facility where water or chemicals are applied. [s. NR 439.04(1)(d), Wis. Adm. Code, and 07-JAJ-042]

ZZZ. Conditions Applicable to the Entire Facility.

Condition Type	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Malfunction Prevention and Abatement Plan.	(1) A malfunction prevention and abatement plan shall be prepared and followed for the plant. [s. NR 439.11, Wis. Adm. Code] (2) All air pollution control equipment shall be operated and maintained in conformance with good engineering practices (i.e. operated and maintained according to manufacturer's specifications and directions) to minimize the possibility for the exceedance of any emission limitations. [s. NR 439.11(4), Wis. Adm. Code] (3) The facility shall submit the plan to the Department of Natural Resources, West Central Region Air Program, 1300 West Clairemont Box 4001, Eau Claire WI 54702-4001, phone (715) 839-3700, for review and approval whenever this plan is updated or revised. The department may amend the plan if deemed necessary for malfunction prevention or for the reduction of excess emissions during malfunctions. [s. NR 439.11(2), Wis. Adm. Code]	(1) The malfunction prevention and abatement plan shall be developed to prevent, detect and correct malfunctions or equipment failures which may cause any applicable emissions limitation to be violated or which may cause air pollution. [s. NR 439.11(1), Wis. Adm. Code] (2) This malfunction prevention and abatement plan shall include installation, maintenance and routine calibration procedures for the process monitoring and control equipment instrumentation. This plan shall require an instrumentation calibration at the frequency specified by the manufacturer, yearly or at a frequency based on good engineering practice as established by operational history, whichever is more frequent. Inspection and calibration shall also be conducted whenever instrumentation anomalies are noted. [ss. NR 407.09(1)(c)1.c., NR 439.055(4) and s. NR 439.11, Wis. Adm. Code] (3) The malfunction prevention and abatement plan shall require a copy of the operation and maintenance manual for the control equipment to be maintained on site. The plan shall contain all of the elements in s. NR 439.11(1)(a) – (h), Wis. Adm. Code. [s. NR 439.11, Wis. Adm. Code]	None Applicable.

ZZZ. Conditions Applicable to the Entire Facility.

Condition Type	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
2. Stack Testing Requirements.	(1) If any required compliance emission test(s) cannot be conducted within the time frames specified in this permit, the permit holder may request and the Department may approve, in writing, an extension of time to conduct the test(s). [s. NR 439.07, Wis. Adm. Code] (2) All testing shall be performed with the emissions unit operating at capacity or as close to capacity as practicable and in accordance with approved procedures. If operation at capacity is not feasible, the source shall operate at a capacity level which is approved by the Department in writing. [s. NR 439.07(1), Wis. Adm. Code] (3) The Department shall be informed at least 20 working days prior to any stack testing, so a Department representative can witness the testing. At the time of notification, a compliance emission test plan shall also be submitted to the Department for approval. When approved in writing, an equivalent test method may be substituted for the reference test method. The notification and test plan shall be submitted to the Department of	(1) Two copies of the report on any compliance emission tests shall be submitted to the Department for evaluation within 60 days following the completion of tests. [s. NR 439.07(9), Wis. Adm. Code]	None Applicable.

ZZZ. Conditions Applicable to the Entire Facility.

Condition Type	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
	Natural Resources, West Central Region Air Program, 1300 West Clairemont Box 4001, Eau Claire WI 54702-4001, phone (715) 839-3700. [s. NR 439.07(2), Wis. Adm. Code]		
3. Compliance Reports/Records.	(1) Upon issuance of the operation permit, the permittee shall submit periodic monitoring reports. [s. NR 407.09(1)(c)3., Wis. Adm. Code] (2) Upon issuance of the operation permit, the permittee shall submit periodic certification of compliance. [s. NR 407.09(4)(a)3., Wis. Adm. Code] (3) The records required under this permit shall be retained for at least five (5) years and shall be made available to department personnel upon request during normal business hours. [s. NR 439.04, s. NR 439.05, Wis. Adm. Code]	(1) The permittee shall submit a monitoring report which contains the results of monitoring or a summary of monitoring results required by this permit to the Department every six (6) months. (a) The time periods to be addressed by the submittal January 1 to June 30 and July 1 to December 31. (b) The report shall be submitted to the Department of Natural Resources, West Central Region Air Program, 1300 West Clairemont Box 4001, Eau Claire WI 54702-4001, phone (715) 839-3700, within 45 days after the end of each reporting period. (c) All deviations from and violations of applicable requirements shall be clearly identified in the submittal. (d) Each submittal shall be certified by a responsible official as to the truth, accuracy and completeness of the report. (e) The content of the submittal is described in item D. of Part II of the operation permit. [ss. NR 407.09(1)(c)3. & NR 439.03(1)(b), Wis. Adm. Code] (2) The permittee shall submit an annual certification of compliance with the requirements of this permit	None Applicable.

ZZZ. Conditions Applicable to the Entire Facility.

Condition Type	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
		to the Department of Natural Resources, West Central Region Air Program, 1300 West Clairemont Box 4001, Eau Claire WI 54702-4001, phone (715) 839-3700, and to Compliance Data – Wisconsin, Air and Radiation Division, US EPA, 77 W. Jackson Street, Chicago, IL 60604. (a) The time period to be addressed by the report is January 1 to December 31 of the preceding year. (b) The report shall be submitted to the Wisconsin Department of Natural Resources and the US EPA within 45 days after the end of each reporting period. (c) The information included in the report shall comply with the requirements of Part II, Section N of this permit. (d) Each report shall be certified by a responsible official as to the truth, accuracy and completeness of the report. [ss. NR 407.09(4)(a)3. & NR 439.03(1)(c), Wis. Adm. Code]	